ABSTRACT OF THE DISCLOSURE

Disclosed is a measuring system for measuring performance of an imaging optical system by use of an interferometer, which includes an interferometer arranged to measure transmission wavefronts separately or sequentially, in relation to at least one of plural measurement points defined along a plane perpendicular to an optical axis of the imaging optical system, wherein position coordinates of object side and image side imaging points of the plural measurement points are measured, and a computing unit being communicated with the interferometer, the computing unit being operable to calculate a wavefront as measured by the interferometer and at least one of a wavefront aberration and an imaging state of the imaging optical system, and the computing unit being operable to correct a measured value related to at least one of a wavefront aberration and an imaging state of the imaging optical system at another measurement point, while taking, as a reference, at least one of a wavefront aberration and an imaging state at a standard point set along a plane perpendicular to the optical axis.